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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/996,098

11/26/2001

Marc Dubois

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2512

7590

10/09/2003

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EXAMINER

BHAT, ADITYA S

ART UNIT

PAPER NUMBER

2863

DATE MAILED: 10/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/996,098

Applicant(s)

DUBOIS ET AL.

Examiner

Aditya S Bhat

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2863

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 26 November 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) 1-8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8,9,11,12,14,15,17-19,24,25,27,28,33,37,38,40 and 41 is/are rejected.
- 7) ☒ Claim(s) 10,13,16,20-23,26,29-32,34-36 and 39 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election with traverse of Species II in Paper No. 4 is acknowledged. The traversal is on the ground(s) that figure 3 encompasses the limitations described in species II. This is not found persuasive because the system of figure three is a generic system that could process any of the species.

This application contains claims directed to the following patentably distinct species of the claimed invention:

Species II. Is directed towards measuring sonic energy as disclosed with respect to Page 10 lines 19-21 and Page 13 lines 3-7 of the specification. The requirement is still deemed proper and is therefore made FINAL.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 8-9,11-12,14-15, 17-19, 24-25, 27-28,33, 37-38 and 40-41 are rejected under 35 U.S.C. 102(b) as being anticipated by Bean (USPN 5,274,607).

With regards to claim 8, Bean (USPN 5,274,607) teaches a system for the detection of physical attribute of a manufactured object, the system comprising:  
a sonic measuring device; (Col.1, lines 30-32)  
the sonic measuring device detecting a signal indicative of the physical attribute; (Col. 1, lines 25-31)

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the sonic measuring device generating a measured result associated with the signal;  
(Col.1, lines 22-25)

a signal analyzer, communicatively coupled to the sonic measuring device, that is operable to receive the measured result; (Col. 1, lines 25-30)

an expected result;(Col. 1, lines 29-31)

the signal analyzer comparing the expected result to the measured result, automatically;  
and the signal analyzer producing a comparison of the measure result and the expected result.(Col. 1, lines 32-40)

With regards to claims 9 and 25, Bean (USPN 5,274,607) teaches a model processor communicatively coupled to the signal analyzer; and the model processor generating the expected result from a representation of the manufactured object. (Col. 1, lines 25-40)

With regards to claims 11 and 27, Bean (USPN 5,274,607) teaches a programmable circuitry coupled to the model processor; and the model processor generating the expected result with the programmable circuitry. (Col. 4, lines 47-49)

With regards to claims 12 and 28, Bean (USPN 5,274,607) teaches the representation of the manufactured object is stored on a readable medium, the readable medium being communicatively coupled to the model processor; and the model processor generating the expected result from the stored representation of the manufactured object. (Col. 5, lines 39-46)

With regards to claim 14, Bean (USPN 5,274,607) teaches a system for comparing measurements from an ultrasound testing system, the ultrasound testing system testing manufactured object for physical characteristics and detecting a signal generated on or in the manufactured object, the system comprising:

a signal analyzer that compares a predetermined expected result with a measured result; (Col. 1, lines 32-40)

the measured result associated with the signal detected by the ultrasound testing system; (Col.1, lines 25-31 ) and

the predetermined expected result associated with the manufactured object having a certain characteristic. (Col. 1, lines 32-40)

With regards to claim 15, Bean (USPN 5,274,607) teaches a method for detecting a physical attribute of a manufactured object using a sonic measuring device, the sonic measuring device measuring sonic energy from the manufactured object and obtaining a measured signal, the method comprising:

comparing the measured signal to an expected result; and determining the physical attribute based on the step of comparing. (Col. 1, lines 32-40)

With regards to claim 17, Bean (USPN 5,274,607) teaches the comparison is selectively repeated, the expected result being repeatedly generated from an iteratively

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adapted mathematical model, the comparison being selectively repeated until a quantifier indicative of the comparison has a predetermined value. (Col.1, lines 32-40)

With regards to claim 18, Bean (USPN 5,274,607) teaches deriving the expected result from empirical tests. (Col. 1, lines 32-40)

With regards to claim 19, Bean (USPN 5,274,607) teaches the comparison is selectively repeated, the expected result being selected from a set of predetermined expected results, the comparison being selectively repeated until a quantifier indicative of the comparison has a predetermined value. (Col.1, lines 32-40)

With regards to claim 24, Bean (USPN 5,274,607) teaches a system for the detection of a physical attribute of a manufactured object wherein a sonic measuring device measures a sonic energy from the manufactured object and produces a measured signal, the system comprising:

a signal analyzer communicatively coupled to the sonic measuring device and operable to receive the measured signal; (Col. 1, lines 32-40)

an expected result; (Col. 1, lines 29-31)

the signal analyzer comparing the expected result to the measured result automatically; (Col. 1, lines 32-40) and

the signal analyzer producing a comparison of the measured signal and the expected result. (Col. 1, lines 32-40)

With regards to claim 27, Bean (USPN 5,274,607) teaches a programmable circuitry communicatively coupled to the model processor; and the model processor generating the expected result with the programmable circuitry. (Col. lines )

With regards to claim 28, Bean (USPN 5,274,607) teaches the representation of the manufactured object is stored on a readable medium, the readable medium being communicatively coupled to the model processor and the model processor generating the expected result from the stored representation of the manufactured object. (Col. lines )

With regards to claim 33, Bean (USPN 5,274,607) teaches a system for the detection of a physical attribute of a manufactured object wherein a sonic measuring device measures a sonic energy from the manufactured object and produces a measured signal, the system comprising:

a signal analyzer communicatively coupled to the sonic measuring device and operable to receive the measured signal; (Col. 1, lines 32-40)

a model processor communicatively coupled to the signal analyzer; (Col.1, line 32 )

the signal analyzer comparing an output of the model processor to the measured result automatically; (Col. 1, lines 32-40) and

the signal analyzer producing a comparison of the measured signal and the output of the model processor. (Col. 1, lines 32-40)

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With regards to claim 37, Bean (USPN 5,274,607) teaches a method for detecting a physical attribute of a manufactured object wherein a sonic measuring device measures a sonic energy from the manufactured object and produces a measured signal, the method comprising:

comparing the measured signal to an output from a model processor with a signal analyzer; (Col. 1, lines 32-40) and

producing an output from the signal analyzer indicative of the step of comparing (Col.1, lines 40-45)

With regards to claim 38 Bean (USPN 5,274,607) teaches the steps of comparing and producing are selectively repeated, the comparing being of the measured signal and the output from the model processor, the model processor selectively changing the output in response to the output from the signal analyzer. (Col. 1, lines 32-40)

With regards to claim 40, Bean (USPN 5,274,607) teaches the model processor selectively changes the output to one of a plurality of predetermined outputs. (Col.1, lines 32-40)

With regards to claim 41, Bean (USPN 5,274,607) teaches a program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform the method steps for detecting a physical attribute of a manufactured object using a sonic measuring device, the sonic measuring device measuring sonic energy from the manufactured object and obtaining a measured signal, said method steps comprising:

comparing the measured signal to an expected result;(Col.1, lines 32-40) and determining the physical attribute based on the step of comparing.(Col.1, lines 25-31)

### ***Claim Objections***

Claims 10,13,16,20-23, 26, 29-32, 34-36 and 39 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 10,13,16,20-23, 26, 29-32, 34-36 and 39:

The primary reason for the allowance of claim 10 and 26 is the inclusion of the representation of the manufactured object is a computer-aided-drafting representation of the manufactured object. It is this features found in the claims, as they are claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes this claim allowable over the prior art.

The primary reason for the allowance of claim 13,20-23, and 29-32 is the inclusion of displaying a physical attribute. It is this feature found in the claims, as they are claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes this claim allowable over the prior art.

The primary reason for the allowance of claim 16, 34-36 and 39 is the inclusion a mathematical model. It is this feature found in the claims, as they are claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes this claim allowable over the prior art.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Iannazo et al (USPN 5,882,204) teaches a football simulation trainer, Pridham (USPN 4,213,195) teaches a sonic direction system and Urmson et al (USPN 5,060,507) teaches a method and apparatus for fluid mixture monitoring constituent analysis and composition control.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aditya S Bhat whose telephone number is 703-308-0332. The examiner can normally be reached on M-F 9-5:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on 703-308-3126. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Aditya Bhat  
September 30, 2003

  
John Barlow  
Supervisory Patent Examiner  
Technology Center 2800